

WHAT IS CLAIMED IS:

1. Exercising machine (1) (100) (200) (500) provided with a frame (10) (110) (210) (510) and with at least one operating apparatus (30) (130) (230) (530) which can be used by a user to perform a physical exercise; the said machine comprising a load group (15) (115) (215) (515) supported by the said frame (10) (110) (210) (510) and connected to the said operating apparatus (30) (130) (230) (530) by means of at least one cable (26) (126) (226) (526'') wound around a plurality of transmission members (25) (140) (240) (525) supported by the frame (10) (110) (210) (510) and arranged so as to define a given path (P) (P'') for the said cable (26) (126) (226) (526'') ; wherein the said load group (15) (115) (215) (515) comprises at least two load units (16, 17) (516, 517) separate from each other and connected together by means of the said cable (26) (126) (226) (526'') and arranged at ends of the said path (P) (P'') on opposite sides of the said operating apparatus (30) (130) (230) (530) so that the said operating apparatus (30) (130) (230) (530) can be tensioned on respective opposite sides by means of load values different from each other.

2. Machine as claimed in Claim 1, wherein the two said load units (16, 17) (516, 517) can be activated separately; the said path (P) (P'') being delimited by the said load units (16, 17) (516, 517) connected together by means of two end portions (26, 27) (526, 527) of the said cable (26) (126) (226) (526'') and arranged on opposite sides of the said operating apparatus (30) (130) (230) (530) so that the said operating apparatus (30) (130) (230) (530) can be tensioned by means of the two said load units (16, 17) (516, 517), with separate loads applied constantly to the operating apparatus (30) (13) (230) (530) on opposite sides by means of the said cable (26) (126) (226) (526'').

3. Machine as claimed in Claim 2, wherein at least one of the said load units (16, 17) (516, 517) is of the gravitational type and has an adjustable load value.

4. Machine as claimed in Claim 3, wherein the said path (P) has at least one exercising section (29) (129) (229) provided with the said operating apparatus (30) (130) (230) and arranged between two consecutive transmission members (25', 25'') (140', 140'') (240', 240'') of the said transmission members (25) (140) (240); the said consecutive transmission members (25', 25'' (140',

140'') (240', 240'') having respective pivoting axes (23) (123) (223) parallel to each other and being supported by the said frame (10) (110) (210) in such a way as to be coplanar so that the said operating apparatus (30) (130) (230) can be used in a plane common to the said consecutive transmission members (25', 25'') (140', 140'') (240', 240'').

5. Machine as claimed in Claim 4, wherein the said consecutive transmission members (140', 140'') (240', 240'') which delimit the said exercising section (129) (229) are supported by the said frame (110) (210) rotatably about a common axis (142) (242) of transverse rotation with respect to the said pivoting axes (123) (223) so as to allow rotational movements of the said exercising section (129) (229) about said axis (142) (242) of rotation.

6. Machine as claimed in Claim 5, wherein the said gravitational load unit (16) (17) comprises a plurality of weights (18) arranged on top of each other and supported by the said frame (10) (110) (210) slidably in a given direction; the said load units (16) (17) also being provided with a selection member (22) able to isolate at least one weight (18) from the said plurality of

weights (18) and connected to one corresponding said end portion of the said cable (26) (126) (226).

7. Exercising machine (1) (100) (200) (500) provided with a frame (10) (110) (210) (510) and with at least one operating apparatus (30) (130) (230) (530) which can be used by a user to perform a physical exercise; the said machine comprising a load group (15) (115) (215) (515) supported by the said frame (10) (110) (210) (510) and connected to the said operating apparatus (30) (130) (230) (530) by means of at least one cable (26) (126) (226) (526'') wound around a plurality of transmission members (25) (140) (240) (525) supported by the frame (10) (110) (210) (510) and arranged so as to define a given path (P) (P'') for the said cable (26) (126) (226) (526'') ; wherein the said load group (15) (115) (215) (515) comprises at least two load units (16, 17) (516, 517) separate from each other, connected together by means of the said cable (26) (126) (226) (526'') and arranged at ends of the said path (P) (P'') on opposite sides of the said operating apparatus (30) (130) (230) (530) so that the said operating apparatus (30) (130) (230) (530) can be tensioned on respective opposite sides by means of load values which are different from each other; the two said load units (16, 17) (516, 517) being able to be activated separately; the

said path (P) being delimited by the said load units (16, 17), connected together by means of two end portions (26, 27) (526, 527) of the said cable (26) (126) (226) (526'') and arranged on opposite sides of the said operating apparatus (30) (130) (230) (530) so that the said operating apparatus (30) (130) (230) (530) can be tensioned by means of the two said load units (16, 17) (516, 517), with different loads applied constantly to the operating apparatus (30) (130) (230) (530) on opposite sides by means of the said cable (26) (126) (226) (526'') ; at least one of the said load units (16, 17) (516, 517) being of the gravitational type and having an adjustable load value.

8. Exercising machine (1) (100) (200) (500) provided with a frame (10) (110) (210) (510) and with at least one operating apparatus (30) (130) (230) (530) which can be used by a user to perform a physical exercise; the said machine comprising a gravitational load group (15) (115) (215) (515) supported by the said frame (10) (110) (210) (510) and connected to the said operating apparatus (30) (130) (230) (530) by means of at least one cable (26) (126) (226) (526'') having a pair of end portions (27, 28) (527, 528) separate from each other and being wound around a plurality of transmission members (25) (140) (240) (525) supported by the frame (10) (110) (210) (510) and arranged so as to

define a given path (P) (P''); wherein the said path (P) (P'') comprises at least one middle section (29) (129) (229) (529) provided with the said operating apparatus (30) (130) (230) (530) and to which the said operating apparatus (30) (130) (230) (530) is joined in a freely slidable manner, so as to allow a user to interact with the said section of cable (26) (126) (226) (526'') at a point which can be defined as required and modified during use at the user's discretion.

9. Exercising machine (1) (100) (200) (500) provided with a frame (10) (110) (210) (510) and with at least one operating apparatus (30) (130) (230) (530) which can be used by a user to perform a physical exercise; the said machine comprising a load group (15) (115) (215) (515) supported by the said frame (10) (110) (210) (510) and connected to the said operating apparatus (30) (130) (230) (530) by means of at least one cable (26) (126) (226) (526'') wound around a plurality of transmission members (25) (140) (240) (525) supported by the frame (10) (110) (210) (510) and arranged so as to define a given path (P) (P'') for the said cable (26) (126) (226) (526''); wherein the said load group (15) (115) (215) (515) comprises at least two load units (16, 17) (516, 517) separate from each other, connected together by means of the said cable (26) (126) (226) (526'') and arranged at ends of the said path (P) (P'') on opposite sides of the

said operating apparatus (30) (130) (230) (530) so that the said operating apparatus (30) (130) (230) (530) can be tensioned on respective sides by means of load values which are different from each other; at least one of the said load units (16, 17) (516, 517) being of the gravitational type and having an adjustable load value.

10. Exercising machine (1) (100) (200) (500) provided with a frame (10) (110) (210) (510) and with at least one operating apparatus (30) (130) (230) (530) which can be used by a user to perform a physical exercise; the said machine comprising a gravitational load group (15) (115) (215) (515) supported by the said frame (10) (110) (210) (515) and connected to the said operating apparatus (30) (130) (230) (530) by means of at least one cable (26) (126) (226) (526'') having a pair of end portions separate from each other and being wound around a plurality of transmission members (25) (140) (240) (525) supported by the frame (10) (110) (210) (510) and arranged so as to define a given path (P) (P''); wherein the said path (P) (P'') comprises at least one middle section (29) (129) (229) (529) in which the said operating apparatus (30) (130) (230) (530) is associated with the said cable (26) (126) (226) (526'') in a freely slidable manner and is arranged between two consecutive transmission members (25)

(140) (240) (525) so as to allow a user to interact by means of the said operating apparatus (30) (130) (230) (530) with the said section of cable (26) (126) (226) (526'') at a point which can be defined as required and modified during use at the user's discretion.

11. Exercising machine (1) (100) (200) (300) (400) (500) provided with a frame (10) (110) (210) (310)(410) (510) and with at least one operating apparatus (30) (130) (230) (330) (430) (530) which can be used by a user to perform a physical exercise; the said machine comprising a gravitational load group (15) (115) (215) (315) (415) (515) supported by the said frame (10) (110) (210) (310) (410) (510) and connected to the said operating apparatus (30) (130) (230) (330) (430) (530) by means of at least one cable (26) (126) (226) (326'') (426'') (526'') having a pair of end portions separate from each other and wound around a plurality of transmission members (25) (140) (240) (325) (425) (525) supported by the said frame (10) (110) (210) (310) (410) (510) so as to define a given path (P) (P''); wherein the said path (P) (P'') comprises at least one middle section (29) (129) (229) (329) (429) (529) arranged between two said consecutive transmission members (25) (140) (240) (325) (425) (525) and along which the said operating apparatus (30) (130) (230) (330) (430) (530) is

in turn rigidly joined to the said cable (26) (126) (226) (326'') (426'') (526'') at a point which can be defined as required so as to allow a user to interact with the said load group (15) (115) (215) (315) (415) (515) by means of the said operating apparatus (30) (130) (230) (330) (430) (530).

12. Exercising machine (1) (100) (200) (300) (400) (500) (600) provided with a frame (10) (110) (210) (310) (410) (510) and with at least one operating apparatus (30) (130) (230) (330) (430) (530) (630) which can be used by a user to perform a physical exercise; the said machine (1) comprising a load group (15) (115) (215) (315) (415) (515) (615) supported by the said frame (10) (110) (210) (310) (410) (510) (610) and connected to the said operating apparatus (30) (130) (230) (330) (430) (530) (630) by means of at least one cable (26) (126) (226) (326'') (426'') (526'') (626'') wound around a plurality of transmission members (25) (140) (240) (325) (426) (525) (625) supported by the frame (10) (110) (210) (310) (410) (510) (610) and arranged so as to define a given path (P) (P'') for the said cable (26) (126) (226) (326'') (426'') (526'') (626'') ; wherein the said load group is able to cooperate with the said operating apparatus (30) (130) (230) (330) (430) (530) (630) by means of the said cable (26) (126) (226) (326'') (426'') (526'') (626'') so that the said operating

apparatus (30) (130) (230) (330) (430) (530) (630) is, during use, constantly subject to the action of three forces coplanar with each other, two of which oppose each other and are exerted by the said cable (26) (126) (226) (336'') (426'') (526'') (626'').